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ABSTRACT

The development of a new approach to the analysis of teacher behavior on the dominative-integrative dimension is proposed. The major characteristics of integrative behavior are flexibility of response and acceptance of individual differences, while dominative behavior is characterized by rigidity. The approach consists of a combination of direct analysis of teacher behavior using a revision of the H. H. Anderson System, and inferred teacher behavior analysis through the observation of individual children's interactions with the Room-as-Teacher. The dual technique can be used in a variety of classroom settings ranging from highly structured to open and flexible and provides a more complete picture of integrative and dominative teacher behavior. (Autnor/BW)

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Development of a New Approach to the Measurement of Integrative Teacher Behavior

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Abstract

The development of a new approach to the analysis of integrative teacher behavior was proposed. The approach consists of a combination of direct analysis of teacher behavior using a revision of the Anderson system and inferred teacher behavior analysis through the observation of individual children's interactions with the Room-As-Teacher. The dual technique can be used in a variety of classroom settings ranging from highly structured to open and flexible and provides a richer picture of integrative and dominative teacher behavior.

Development of a New Approach to the Measurement of Integrative Teacher Behavior

Purpose

The purpose of this paper is to describe progress made toward developing a new approach to the measurement of integrative teacher behavior in order to facilitate more sensitive measurement of that dimension of behavior in classroom settings.

Perspective

In 1945, H H Anderson published a system for analyzing teacher behavior on the dominative-integrative dimension. This observational instrument grew out of concern over the ways in which teachers transmit to young children techniques for relating to others and the ways in which teacher behavior furthers or obstructs children's emotional growth. Anderson saw integrative behavior as the technique of democracy and dominative behavior as the technique of authoritarianism. The major characteristics of integrative behavior, as Anderson defined them, are flexibility of response and acceptance of individual differences. Dominative behavior is characterized by rigidity and "... tends to stifle differences in others, to reduce the interplay of differences." (Anderson, 1943, p. 461)

The keystone of the Anderson system is control. When the teacher controls and directs child behavior, determines activities, demands compliance, or seduces the child into compliance, the behavior is dominative. When the teacher supports a self-initiated activity or a child's idea, helps the child to move in a direction the child chooses, and accepts and encourages divergent responses, the behavior is integrative. Over a period of time, each teacher displays a

characteristic pattern of control behavior on the dominative-integrative continuum that can be expressed as a ratio between integrative and dominative behaviors.

The demonstration by Anderson and his colleagues (Anderson, 1945, 1946a, 1946b) that teacher behavior on the dominative-integrative dimension was measureable, stable, and related to important child behaviors paved the way for the development of numerous instruments to investigate teacher behavior and its relationship to child variables. Continua related to the dominative-integrative dimension were in large part the basis for these instruments. Withall (1949) constructed an observational scale on a child-centered/teacher-centered continuum; Flanders (1963) developed categories of direct and indirect teacher behavior; Hughes (1959) described teacher functions ranging from facilitating to controling. Classroom research findings indicate that teacher behaviors designated as integrative, child-centered, or indirect have a positive relationship with children's social skills and mental health. (Anderson, 1945, 1946a, 1946b; Flanders, 1967; Katz, 1969; Minuchin, Biber, Shapiro, and Zimiles, 1969; Morrison, 1965; Soar, 1972; Spaulding, 1965)

In addition to classroom research, strong support for the importance of integrative teacher behavior for children's optimal emotional and social growth comes from such diverse sources as Erikson (1963), Frenkel-Brunswik (Adorno, Frenkel-Brunswik, Levinson, and Sanford, 1969), and Piaget (1971). Despite their differences in focus, these authors present similar descriptions of adult behaviors toward children that can thwart or further the development of reasoned autonomy, relatedness, and sense of responsibility for oneself and to others. Erikson noted that prohibition rather than guidance of initiative heightens guilt, which may in turn result in over-control, self-righteousness, and suspicion. Manipulation and control by adults, failure to

permit children to complete initiated acts and activities in idiosyncratically important ways, leads to "impulsive self-will or, by contrast, exaggerated self-coercion... and the vengeful manipulation and coercion of others." Frenkel-Brunswik reported that authoritarian adults experience discipline in childhood as "a force outside the child to which at the same time he must submit," (p. 372) while democratically oriented adults had experienced childhood discipline in a way that "invites the cooperation and understanding of the child and makes it possible for him to assimilate it." (p. 372) Piaget (1971) noted that adult-imposed control relieves the child of the necessity of developing internal discipline based on interaction with other children and permits the child to view good and bad as that which does or does not conform to adult rules.

Although most educators agree on the inappropriateness of dominative teacher behavior in a democratic society, research describes an overwhelming use of dominative, controling, and teacher-centered behavior in the classroom. (Clifton, 1944; Dischel, 1973; Ely and McLeod, 1970; Hoehn, 1951; Flanders, 1963; Hughes, 1959; Rosenfeld, 1974; Silberman, 1970) Flanders (1970) summarized a series of studies of teacher behavior as follows:

> ... it does not seem very far out of line to suggest that teachers usually tell pupils what to do, how to do it, when to start, when to stop, and how well they did whatever they did. My conservative guess is that at least one-half of the pupils in the country experience chains of events that are inconsistent with our educational aspirations and contrary to what we would like to believe. (p. 14)

Problems of Measurement

Although many observational systems are based on continua related to the dominative-integrative dimension, only the Anderson system provides an undiluted focus on the dominative-integrative quality of teacher behavior.

When categories irrelevant to or antithetical to this basic dimension are included in an instrument, the resulting measure in necessarily less reflective of the dominative-integrative dimension of behavior. For example, the systems developed in the Anderson tradition (e.g.: Withall, Flanders) place teacher praise or acceptance of child behavior in a single category of teacher behavior that is considered facilitating, child-centered, or supportive. Praise is scored as a positive teacher behavior whether it is in response to self-initiated, spontaneous, or divergent child behavior, or in response to conforming child behavior. In the Anderson system, the former teacher behavior would be categorized as integrative, and the latter as dominative. Thus, later systems erode the essential meaning of the dominative-integrative dimension. As Rosenshine (1971) pointed out, many observational systems citing the Anderson tradition seem actually to be in the tradition of behavior modification and reinforcement theory.

A further difficulty with the use of later systems developed in the Anderson tradition is their tendency to deal only with teachers' verbal behavior and to focus on the instructional interaction rather than the total human interaction between teacher and child. This poses particular difficulties in early childhood classrooms, where, theoretically, informal social interaction predominates over formal instruction.

Researchers (Rosenfeld, 1974; Kennedy, 1974) using the Anderson instrument in recent years have reported difficulties in measuring integrative behavior. Anderson (1945) noted in his original monograph that integrative behavior is much more difficult to observe and classify than dominative behavior. This is especially so in classrooms where teachers use organization plans other than whole-class instruction with the teacher in the front of the class. By its very nature, integrative behavior is often subtle, long-range, complex, and non-verbal. However, difficulties inherent in observing and

categorizing integrative behavior do not diminish the importance of the behavior. Pressures toward more authoritarian and oppressive teaching methods make it urgent to find more reliable ways to describe and measure integrative behavior so as to make the consequences of different teaching styles for children's emotional and social growth more completely understood.

Method and Results

Revision of the Anderson Instrument

In 1974, the authors received a small Dean's Development Fund award at New York University to explore ways to improve the measurement of integrative teacher behavior. As a first step, they reviewed the categories and behavioral examples of the original Anderson system in order to revise and rewrite the instrument for use at the present time. They were guided by the following suggestion of Anderson:

> Note DIRECTIONALITY of the interacting for each recorded contact: Does the contact tend toward opening the life space or freedom of thinking and acting for another (toward providing an "open system" for others)? Or toward a closing of the life space, restricting freedom of thinking and acting of another? (Anderson, "Supplementary Notes", in Simon and Boyer, MIRRORS FOR BEHAVIOR, 30.2-4.)

Based on this then, INTEGRATIVE contacts are behaviors that open the way for, further, invite, encourage, accept, respond to, or build upon individual expressions of initiative, spontaneity, or interest. The continuum from "opening the way for" to "building upon" covers teacher behavior that creates the possibility for individual expression of initiative, spontaneity, or interest as well as teacher behavior that reacts positively to such expression. Although the original Anderson system rated "open the

way for" behaviors, or IN behaviors, as less integrative than the "accepting" or "responding" behaviors, or IT behaviors, this ranking now appears inaccurate. Both kinds of behavior seem equally essential to integrative teaching. Therefore, the Ely-Kennedy revision changes the two original IT and IN categories to one. This is called Integrative and is sub-divided into (a) teacher behavior that opens the way for children's interaction, spontaneity, or interest, and (b) teacher behaviors that accept, respond to, or build upon children's expressions of initiative, spontaneity, or interest. The authors developed modifications of the original behavioral examples that Anderson provided to make scoring easier.

DOMINATIVE contacts are behaviors that control, direct, or determine behavior and thereby control, direct, or obstruct the expression of spontaneity, initiative, and interest. The three levels of dominance proposed by Anderson are, essentially, benevolent control, neutral control, and control in conflict. In benevolent control, the teacher displays some awareness of the child's interest or need, but retains the decision-making power. The teacher chooses the child for an activity at the child's request, gives permission or denies it with an explanation, or approves required work. Here we find the rewards of conformity: being chosen, being praised for doing one's assigned work well, receiving permission, or at least being told why it is withheld.

Neutral control includes what Anderson called the routine mechanics of group management, the administrative short-cuts to a teacher-determined goal. There is no evidence of conflict with the children, and conformity is assumed. This category of teacher behavior comprises a high proportion of classroom life in which the teachers tell children what to do, and the children simply do it.

Control with conflict refers to situations where the child is expressing

an interest or pursuing an activity, and the teacher verbally or physically stops that behavior or rejects that expression of interest without regard for the interests of the child. The child need not protest for the teacher behavior to be scored in this category; the teacher need merely stop the child from the pursuit of an interest or behavior.

Anderson's categories and behavioral examples for dominative behavior were found to be still highly descriptive and relevant and, therefore, were retained. The revised instrument, then, is a four-category observational system:

1. Integrative contacts
2. Benevolent dominative contacts
3. Neutral dominative contacts
4. Dominative contacts involving conflict, verbal or physical.

The revision process involved thirty-two observations of videotaped and live classroom interactions. Five researchers in classroom analysis judged the revised categories and behavioral examples to have face validity and to retain the intent and focus of the original system.

Room-As-Teacher

The extensive observation and analysis of early childhood classrooms involved in the revision of the Anderson system confirmed the difficulty of recording the integrative quality of a classroom by observation of teacher behavior alone. It was clear that in many classrooms there was evidence of integrative teacher behavior that could not be directly observed and therefore could not be scored.

The authors considered and eliminated a variety of strategies to make these behaviors more accessible to measurement before they evolved a possible solution: to combine the conventional direct measure of teacher behavior,

using the Ely-Kennedy revision of the Anderson instrument, with an indirect, or inferred, measure of teacher behavior through the analysis of children's actions in the classroom.

The assumption underlying the inference approach is that, since the teacher determines the rules of conduct in the classroom, that environment itself becomes, especially in early childhood classes, an extension of the teacher. Thus, the child's ACTION in the physical and social environment of the classroom becomes INTERACTION with the Room-As-Teacher. This action in the room can be seen as an extension of the child's interaction with the teacher. Observation of the child's interaction with the Room-As-Teacher would therefore permit the inference of integrative teacher behavior. For example, a given classroom environment may seem to invite the exploration of materials by children. In the absence of directly observable teacher behavior, children may freely approach and use the easel, crayons, games; they may ask permission; they may stay away. Although individual differences would account for some of the variability in children's interaction with the Room-As-Teacher, a preponderance of self-directed and spontaneous initiatives by children would support the inference of integrative teacher behavior. Conversely, if most children fail to take initiatives in approaching apparently available materials, or need specific permission to do so, integrative teacher behavior would not be inferrable.

In order to explore the combination of direct and inference measures of teacher behavior, the authors sychronized two videotape cameras, one focussing on the teacher and the other upon each child for one minute, in random order. Fourteen videotapes were made in early childhood classrooms. Analysis of the tapes using the revised Anderson system and the Room-As-Teacher technique suggested that the latter did indeed provide information about integrative teacher behavior not available from direct observation of the teacher,

and that integrative teacher behavior could be inferred. The Room-As-Teacher technique permitted description precisely in those fluid classroom situations that were difficult if not impossible to analyze using the more conventional direct methods. The combined instrument was applicable to classroom situations ranging from highly structured to open and flexible. The dimension of Room-As-Teacher, combined with the conventional measure of teacher behavior, provided a richer view of teacher behavior and one truer to reality.

The next task was to develop a catalogue of behavioral examples of children's interactions with the Room-As-Teacher that permit inference of integrative teacher behavior. Thus far, a research assistant has analyzed and described such interactions in sixteen observations totalling thirty-five hours.

This process has provided some insights about sampling and recording procedures for Room-As-Teacher and for the combination of revised Anderson and Room-As-Teacher. It now seems probable that Room-As-Teacher will comprise two categories, 'Integrative Behavior Can Be Inferred,' and 'Integrative Behavior Cannot Be Inferred.' It also seems clear that data collected with Room-As-Teacher will not be combined with data obtained with the revised Anderson system but will be expressed separately as an additional description of the integrative quality of interaction. Room-As-Teacher can be used to score each child in rotation several times during a half-hour observation. During an hour's observation, then, it should be possible to get an adequate sample on both revised Anderson and Room-As-Teacher.

Since the practicability of the indirect measurement of integrative teachers has been determined, the remaining tasks are to complete a catalogue of behavioral examples for the inference; to establish observer reliability

on the combination of the revised Anderson system and Room-As-Teacher; to establish instrument reliability and concurrent validity.

Discussion

Analytical systems to study teaching abound. Simon and Boyer (1970) listed more than one hundred systems, and probably hundreds more exist in doctoral dissertations and unpublished studies. The authors searched available systems and found none that retains the dominative-integrative focus of the Anderson system.

The system proposed combines a moderately low-inference category system - the revised Anderson instrument - with a high-inference sign system - the Room-As-Teacher. While lower inference category systems are easier to use and can result in higher reliability, the complexity and elusiveness of the behavior being studied justifies at least the initial use of a high-inference sign system. Direct observation of teacher behavior simply does not supply the data about the nature of integrative behaviors that a sign system focussed on children's behavior provides. The combination of low- and high-inference data is recommended by Rosenshine and Furst (Travers, 1973, p. 166) as a promising avenue for future research. The combination of strategies such as sign and category instruments is also recommended for the study of the elusive phenomena of classroom life.

The move away from Anderson's concern with teacher control behavior and children's mental health is indicated by the fact that his work is described at length in the first HANDBOOK OF RESEARCH ON TEACHING (Gage, 1963, pp. 264-7) but is noted only on a table in the second HANDBOOK (Travers, 1973, p. 139). The second HANDBOOK echoes the climate of the times in its suggestions for additional analytical systems focussed on the cognitive domain. It is unlikely that the lack of adequate measures of teacher behaviors related to children's mental health is the only reason for the shift in focus from the

affective to the cognitive domain. However, a more sensitive measure of relevant teacher behavior might well be the first step in refocussing concern on the affective domain.

The authors certainly do not reject cognitive growth as a major educational objective. They may differ with some in their view of the interrelatedness of affective and cognitive growth, in their belief that academic achievement is not necessarily contributory to mental health, and in their belief that integrative and dominative teacher control must be further studied and described to determine their short-term effects on young children's mental health and their long-term effects on the adults the children become.

The authors reason that if we wish to extend our understanding of the effect of teacher behavior on children's emotional and social growth, it is necessary to return to the theoretical framework Anderson established and to extend the Anderson instrument to measure more accurately the integrative quality of teacher behavior. More sensitive measurement of teacher behavior is of course only part of the problem. Adequate measures of young children's emotional and social development are notoriously difficult. But, unless educational research is to confine itself to examining the relationship between such variables as positive reinforcement and achievement-test scores, it must make the effort to measure more subtle and more vital aspects of human behavior and development in the classroom.

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